

**WHAT IS CLAIMED IS:**

1. A method for transmitting data via a data transmission unit between data processing units of a data processing system,  
  
transmitting the data in parallel in at least a first protocol and a second protocol;  
  
based on the first protocol, transmitting first data of the data in a first frequency range with a first signal sequence and a first signal level; and  
  
based on the second protocol, transmitting second data of the data in a second frequency range with a second signal sequence and a second signal level;  
  
wherein a first switching level of the first protocol differs from a second switching level of the second protocol.
2. The method as claimed in claim 1, wherein the first data of the first protocol is transmitted asynchronously, together with an acknowledgment signal.
3. The method as claimed in claim 1, wherein the second data of the second protocol is transmitted synchronously, together with an acknowledgment signal.
4. The method as claimed in claim 1, wherein the second data of the second protocol is provided with security data.

5. The method as claimed in claim 1, wherein the first data of the first protocol is transmitted at a transmission rate of approximately 20 mbps.

6. The method as claimed in claim 1, wherein the second data of the second protocol is transmitted at a transmission rate of approximately 640 mbps.

7. The method as claimed in claim 1, wherein the first switching level is assigned to a first driver that is provided for the first protocol, and wherein the first switching level is symmetrical about an H-level of a second driver that is provided for the second protocol.

8. The method as claimed in claim 7, wherein the first switching level assigned to the first driver for the first protocol is 2.5 V, wherein an H-level of the first driver is 5 V, and wherein an L-level of the first driver is 0 V.

9. The method as claimed in claim 7, wherein the second switching level is assigned to the second driver, wherein the second switching level for the second protocol is 5 V, wherein the H-level of the second driver is 6 V, and wherein an L-level of the second driver is 4 V.

10. A data processing system, comprising:

a plurality of data processing units;

a data transmission unit to interconnect the data processing units, wherein the data transmission unit is configured to transmit data of different requirements in parallel in at least a first protocol and a second protocol; and

at a reception end, at least one filter for the data;

wherein the at least one filter is associated with a respective one of the first protocol and the second protocol;

wherein, on a transmission end, based on the first protocol, first data of the data is transmitted in a first frequency range with a first signal sequence and a first signal level;

wherein, on the transmission end, based on the second protocol, second data of the data is transmitted in a second frequency range with a second signal sequence and a second signal level; and

wherein a first switching level of the first protocol differs from a second switching level of the second protocol.